

I. *Historia Plantarum, species hætenus editas aliasque insuper multas noviter inventas & descriptas complectens, &c.* Autore Joanne Rajo e Societate Regia. Tomus primus. Londini, 1686. Fol. Apud Henricum Faithorne R. S. Typographum ; ad Insigne Rosæ in Cæmeterio D. Pauli.

II. *Philosophiæ Naturalis Principia Mathematica, Autore* H. Newton, Trin. Coll. Cantab. Soc. *Matheseos Professore* Lucasiano & *Societatis Regalis Sodali.* Londini. 4to. Prostat apud plures Bibliopolas

*An Account of a Comet seen at Lipsick, Sept. 1686.
taken from the Lipsick Acta Eruditorum for the
Month of November last.*

THAT Comets are so frequently seen of late above what has been formerly observed, happens rather from the diligence and number of those that now apply themselves to the study of the Cœlestial Motions, than from any casual concurrence of those Bodies. That this is so, may be concluded from the five Comets, that in less than six years time have been seen to traverse the Heavens, of which yet only the two first (*viz.* those of 1681 and 1682) by reason of their long tails were generally regarded. That that appeared in *July* and *August* 1683. was not, as I can hear, any where observed in *France*. That that appeared in *June* 1684 was no where else taken notice of but at *Rome*: and now this of *September* 1686. we have no other account of, than this from *Lipsick*. The truth is, that where Comets are destitute of a tayle and appear only like an obscure hazy Star, as those of 1683 and 1684 did, they that first discover them had need be well acquainted

quainted with the Constellations (which few People are,) and must look over the Heavens designedly with great attention, notwithstanding all which 'tis possible for such obscure Stars to pass by unseen.

This Comet was observed at *Lipsick* by the diligent and accurate Mr. *Kirck*; in whose Ephemerides for this year there is likewise a brief account thereof; He saw it only twice, viz. on the 8th. and 9th. of September ft. vet. 1686. and observed it as follows.

Sept. 8. 4h mane about day-break, he found the Comet in the Constellation of *Leo*, to the right hand of the *Lucida in Lumbis* α (as is conceived, for the Latin Copy is defective in this place) and resembling that Star in colour and magnitude, with a thin and short taile extended upright. Over the Comet in the same verticall was the Star θ α of *Baycr*, or 21 *Tychoni*, distant therefrom by the Micrometer, exactly a degree; and a Line drawn from the *Lucida in lumbis* α to the Comet passed much about half a degree to the right hand of the said θ *Leonis*. The distance of the Comet from *Regulus* taken by a *Radius* was about 17 gr. The next Morning, Sept. 9. the Comet appeared again obscurer and more difficult to observe than before, by reason of the day-light: however, at 3h 58 m the distance thereof from θ α was found by the Micrometer $2^{\circ} . 23\frac{1}{2} m$. and at 4h 40 m. again 2 gr. $25\frac{3}{4} m$. To verifie the Times, the Altitude of the *Lucida in Lumbis* α was Observed 11 gr. 10 min. at 4h. 08m. mane. A right Line drawn by the Comet and the said θ *Leonis* towards β *Leonis*, or the the *Lucida Colli*, left that Star a little to the right hand. The following days being Cloudy no more could be Observed.

This Comet was seen by a Country-man, who first gave notice therof, from the 6t to the 12th of September; the result of whose Observations is, that the Comet was direct in motion, that it moved about $1\frac{1}{2}$ degree *per diem*, and that it seemed rather to decrease in Latitude. On the 7th
of

of *Septemb.* it was about 24 *min.* distant from θ *Leonis*, but its bearing therefrom is not set down. From other parts it is said to have been seen from the first of *September*, but nothing observed.

N. B. That this Star θ *Leonis* was then in 9 *gr.* 2 *min.* of ϖ with North Latitude 9 *gr.* 41 $\frac{1}{2}$ *min.* Whence at the time of the first Observation it may be concluded that the Comet was in 9 *gr.* 55 of ϖ with North Latitude 9° 15 *min.* And at the second Observation the Longitude of the Comet will be found about 11 *gr.* 20 *min.* in ϖ , with much the same North Latitude as before.

These Observations being so few, do scarce suffice to conclude any thing concerning the preceding or consequent motions of this Comet, which being near the Sun and still approaching him was soon lost in his Beams. It may however serve one day, when the Theory of Comets shall attain its perfection, to confirm an *Hypothesis*, and help to ascertain the number of these Heterogeneous Planets, whose frequency makes in more than probable that they have their periodical returns, tho hitherto unknown. And that the Prophecy of *Seneca* [*Erit qui demonstret aliquando in quibus Cometa partibus errent; cur tam seducti a reliquis, quot qualesque sint,*] is not wholly to be despaired of, will soon appear, from the accurate Theory of the Comet of 1680, to be found in the incomparable Treatise of *M. Isaac Newton*, an account whereof is given at the end of this *Transaction*